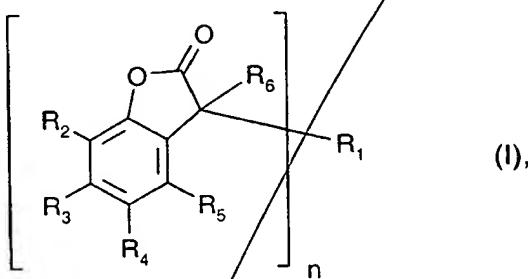


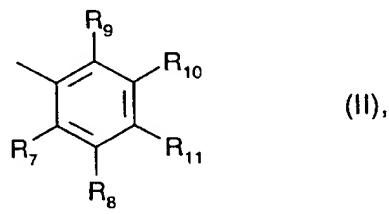
Claims:

1. Process for preventing migration of the oxidised developer in a colour photographic material from one colour sensitive layer to another by incorporating a compound of the formula I into said material



Sukha
wherein, if n = 1,

R₁ is a cyclic residue selected from naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thieryl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxythienyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizinyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizinyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, carbazolyl, β-carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxyazinyl, each of which is unsubstituted or substituted by C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₄alkylthio, hydroxy, halogen, amino, C₁-C₄alkylamino, phenylamino or di(C₁-C₄-alkyl)amino; or R₁ is a radical of formula II

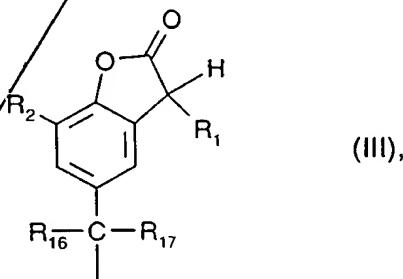


and, if n = 2,

R₁ is unsubstituted or C₁-C₄alkyl- or hydroxy-substituted phenylene or naphthylene; or
 -R₁₂-X-R₁₃-;

R₂, R₃, R₄ and R₅ are each independently of one another hydrogen; chloro; hydroxy; C₁-C₂₅-alkyl; C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; C₁-C₁₈alkoxy; C₁-C₁₈alkylthio; C₁-C₄alkylamino; di(C₁-C₄-alkyl)amino; C₁-C₂₅alkanoyloxy; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyloxy;

C₃-C₂₅alkanoyloxy which is interrupted by oxygen, sulphur or >N—R₁₄; C₆-C₉cycloalkyl-carbonyloxy; benzyloxy or C₁-C₁₂alkyl-substituted benzyloxy; or R₂ and R₃, or R₃ and R₄, or R₄ and R₅, together with the linking carbon atoms, form a benzene ring; or R₄ is -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR'₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R'₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or -(CH₂)_qOH; or, if R₃, R₅ and R₆ are hydrogen, R₄ is additionally a radical of formula III



wherein R₁ is as defined above for n = 1;

R₆ is hydrogen or, when R₄ is hydroxy, R₆ can also be C₁-C₂₅alkyl or C₃-C₂₅alkenyl;

R₇, R₈, R₉, R₁₀ and R₁₁ are each independently of one another hydrogen; halogen; hydroxy;

C₁-C₂₅alkyl; C₂-C₂₅alkyl which is interrupted by oxygen, sulphur or >N—R₁₄; C₁-

C₂₅alkoxy; C₂-C₂₅alkoxy which is interrupted by oxygen, sulphur or >N—R₁₄;

C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenyoxy; C₃-C₂₅alkynyl; C₃-C₂₅alkynyoxy; C₇-C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl- substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen, sulphur

- 50 -

or $\text{N}-\text{R}_{14}$; C₁-C₂₅ alkanoyloxy; C₃-C₂₅ alkanoyloxy which is interrupted by oxygen,

sulphur or $\text{N}-\text{R}_{14}$; C₁-C₂₅ alkanoylamino; C₃-C₂₅ alkenoyl; C₃-C₂₅ alkenoyl which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₃-C₂₅ alkenoyloxy; C₃-C₂₅ alkenoyloxy which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₆-C₉ cycloalkylcarbonyl; C₆-

C₉ cycloalkylcarbonyloxy; benzoyl or C₁-C₁₂ alkyl-substituted benzoyl; benzoyloxy or C₁-

C₁₂ alkyl-substituted benzoyloxy; $\text{O}-\overset{\text{R}_{18}}{\underset{\text{R}_{19}}{\text{C}}}(\text{O})-\text{C}-\text{R}_{15}$ or $\text{O}-\overset{\text{R}_{20}}{\underset{\text{H}}{\text{C}}}(\text{O})-\overset{\text{R}_{21}}{\underset{\text{R}_{22}}{\text{C}}}-\text{O}-\text{R}_{23}$ or, in

formula II, R₇ and R₈, or R₈ and R₁₁, together with the linking carbon atoms, form a benzene ring;

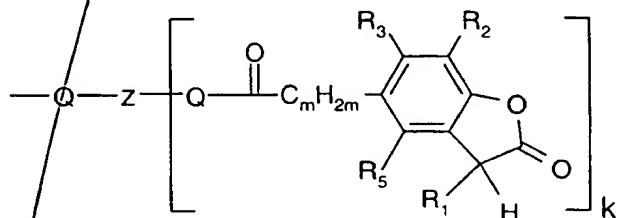
R₁₂ and R₁₃ are each independently of the other unsubstituted or C₁-C₄ alkyl-substituted phenylene or naphthylene;

R₁₄ is hydrogen or C₁-C₈ alkyl;

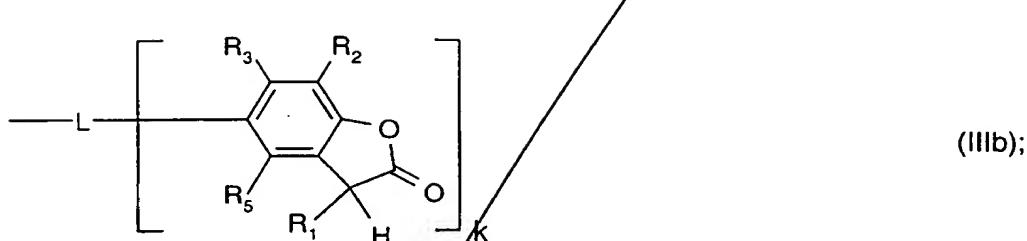
R₁₅ and R'₁₅ independently are hydroxy; $[\text{O}^{\frac{1}{r}} \text{M}^{r+}]$; C₁-C₂₀ alkoxy; C₃-C₂₀ alkoxy

interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅ alkylphenoxy, C₇-C₁₅ alkoxyphenoxy; or are C₅-C₁₂ cycloalkoxy; C₇-C₁₇ phenylalkoxy;

phenoxy; $\text{N}(\text{R}_{24})\text{R}_{25}$; or a group of the formula IIIa or IIIb



(IIIa);



R₁₆ and *R₁₇* are each independently of the other hydrogen, CF₃, C₁-C₁₂alkyl or phenyl, or *R₁₆* and *R₁₇*, together with the linking carbon atom, are a C₅-C₈cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₁₈ and *R₁₉* are each independently of the other hydrogen, C₁-C₄alkyl or phenyl;

R₂₀ is hydrogen or C₁-C₄alkyl;

R₂₁ is hydrogen; unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or >N—R₁₄; C₇-C₉phenylalkyl which is unsubsti-

tuted or substituted at the phenyl moiety by 1 to 3 C₁-C₄alkyl; C₇-C₂₅phenylalkyl which is

interrupted by oxygen, sulphur or >N—R₁₄ and which is unsubstituted or substituted at

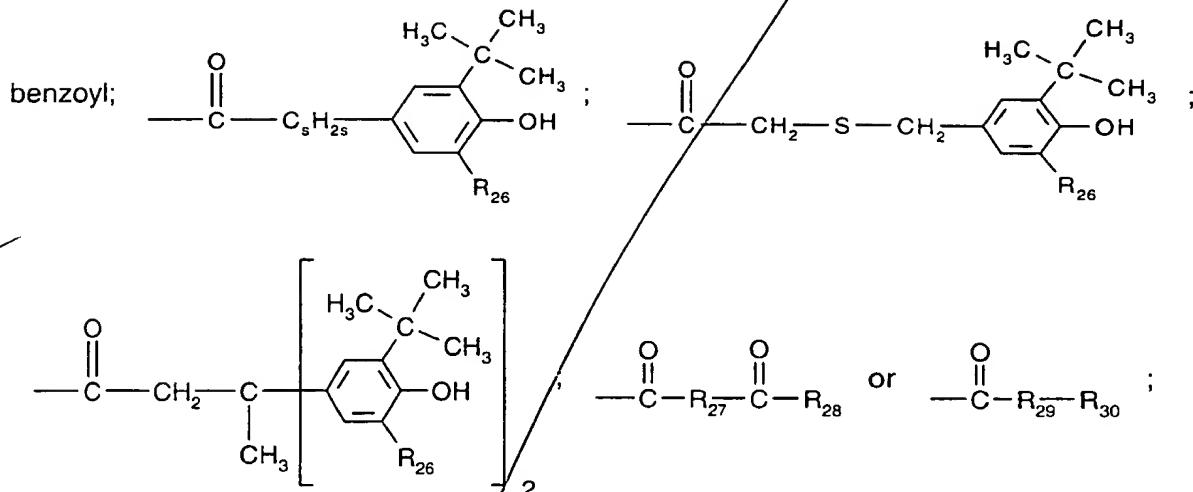
the phenyl moiety by 1 to 3 C₁-C₄alkyl; or *R₂₀* and *R₂₁*, together with the linking carbon atoms, form a C₅-C₁₂cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₂₂ is hydrogen or C₁-C₄alkyl;

R₂₃ is hydrogen; C₁-C₂₅alkanoyl; C₃-C₂₅alkenoyl; C₃-C₂₅alkanoyl which is interrupted by

oxygen, sulphur or >N—R₁₄; C₂-C₂₅alkanoyl which is substituted by a di(C₁-C₆alkyl)phos-

phonate group; C₆-C₉cycloalkylcarbonyl; thenoyl; furoyl; benzoyl or C₁-C₁₂alkyl-substituted



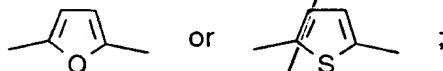
R₂₄ and R₂₅ are each independently of the other hydrogen or C₁-C₁₈alkyl;

R₂₆ is hydrogen or C₁-C₈alkyl;

R₂₇ is a direct bond; C₁-C₁₈alkylene; C₂-C₁₈alkylene which is interrupted by oxygen, sulphur

or > ; C₂-C₁₈alkenylene; C₂-C₂₀alkylidene; C₇-C₂₀phenylalkylidene; C₅-C₈cycloalky-

lene; C₇-C₈bicycloalkylene; unsubstituted or C₁-C₄alkyl-substituted phenylene;



R₂₈ is hydroxy, , C₁-C₁₈alkoxy or

R₂₉ is oxygen or -NH-;

R₃₀ is C₁-C₁₈alkyl or phenyl;

R₃₁ is hydrogen or C₁-C₁₈alkyl;

R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-

C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is as a divalent group

-O-;

Q-C₂-C₁₂alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-interrupted Q-C₄-C₁₂alkylene-Q;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L as a trivalent group is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q-)-C_cH_{2c}-Q-;

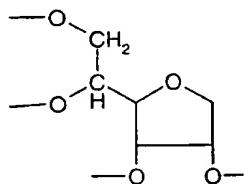
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

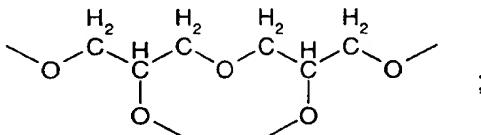
L as a tetravalent group is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetryl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetryl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetryl; a group



or a group



M is an r-valent metal cation;

Q is oxygen or -NH-;

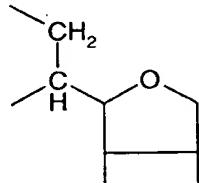
X is a direct bond, oxygen, sulphur or -NR₃₁₋;

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene; Q-interrupted C₄-C₁₂alkylene; phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

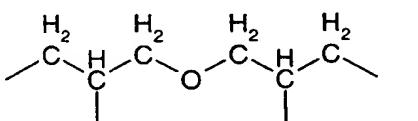
Z as a trivalent group is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent, carbon-ended residue of a hexose or a hexitol, C₄-

C₁₂alkanetetryl, a group



or a group



a, b, c and k independently are 1, 2 or 3;

m is 0 or a number from the range 1-12, preferably 1-6;

n is 1 or 2;

q is 1, 2, 3, 4, 5 or 6;

r is 1, 2 or 3; and

s is 0, 1 or 2;

v is 1, 2, 3, 4, 5, 6, 7 or 8, preferably 1 or 2;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄; and when R₉ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₇ is hydrogen, R₈ is not identical with R₄.

2. Process according to claim 1, wherein in the compound of formula I

R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₂-C₂₅alkoxy which is interrupted by

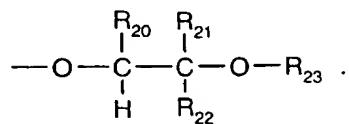
oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenyloxy; C₃-

C₂₅alkynyl; C₃-C₂₅alkynyoxy; C₇-C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyl; C₃-

C₂₅alkenoyl which is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₆-C₉-

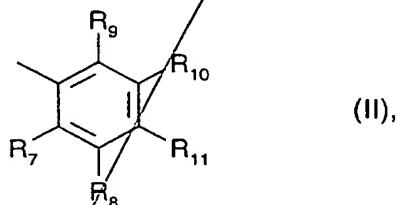
cycloalkylcarbonyl; benzoyl or C₁-C₁₂alkyl-substituted benzoyl; $\text{O}-\text{C}(\text{R}_{18})=\text{C}(=\text{O})-\text{R}_{15}$ or



3. Process according to claim 1 wherein in the compound of formula I

R₁ is naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazi-

nyl, indolizinyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizinyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, carbazolyl, β -carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxyazinyl, each of which is unsubstituted or substituted by C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₄alkylthio, hydroxy, halogen, amino, C₁-C₄alkylamino, phenylamino or di(C₁-C₄-alkyl)amino, or R₁ is a radical of formula II

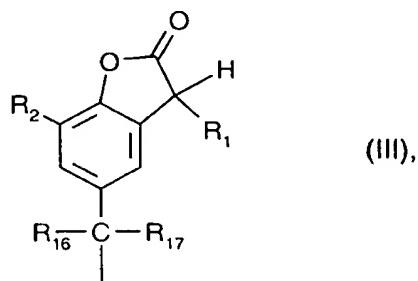


and, if n = 2,

R₁ is unsubstituted or C₁-C₄alkyl- or hydroxy-substituted phenylene or naphthylene; or -R₁₂-X-R₁₃- ,

R₂, R₃, R₄ and R₅ are each independently of one another hydrogen, chloro, hydroxy, C₁-C₂₅-alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; C₁-C₁₈alkoxy, C₁-C₁₈alkylthio, C₁-C₄alkylamino, di(C₁-C₄-alkyl)amino, C₁-C₂₅alkanoyloxy, C₁-C₂₅alkanoylamino, C₃-C₂₅alkenoyloxy;

C₃-C₂₅alkanoyloxy which is interrupted by oxygen, sulphur or >N—R₁₄; C₆-C₉cycloalkyl-carbonyloxy, benzyloxy or C₁-C₁₂alkyl-substituted benzyloxy; or R₂ and R₃, or R₃ and R₄, or R₄ and R₅, together with the linking carbon atoms, form a benzene ring; or R₄ is -C_mH_{2m}-COR₁₅ or -(CH₂)_qOH or, if R₃, R₅ and R₆ are hydrogen, R₄ is additionally a radical of formula III



wherein R₁ is as defined above for n = 1;

R₆ is hydrogen or, when R₄ is hydroxy, R₆ can also be C₁-C₂₅alkyl or C₃-C₂₅alkenyl;

R₇, R₈, R₉, R₁₀ and R₁₁ are each independently of one another hydrogen, halogen, hydroxy,

C₁-C₂₅alkyl; C₂-C₂₅alkyl which is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₁-

AZT
C₂₅alkoxy; C₂-C₂₅alkoxy which is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$;

C₁-C₂₅alkylthio, C₃-C₂₅alkenyl, C₃-C₂₅alkenyloxy, C₃-C₂₅alkynyl, C₃-C₂₅alkynyloxy, C₇-C₉phenylalkyl, C₇-C₉phenylalkoxy, unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino, di(C₁-C₄alkyl)amino, C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is interrupted by oxygen, sulphur

or $\text{N}-\text{R}_{14}$; C₁-C₂₅alkanoyloxy; C₃-C₂₅alkanoyloxy which is interrupted by oxygen,

sulphur or $\text{N}-\text{R}_{14}$; C₁-C₂₅alkanoylamino, C₃-C₂₅alkenoyl; C₃-C₂₅alkenoyl which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₃-C₂₅alkenoyloxy; C₃-C₂₅alkenoyloxy which

is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₆-C₉cycloalkylcarbonyl, C₆-

C₉cycloalkylcarbonyloxy, benzoyl or C₁-C₁₂alkyl-substituted benzoyl; benzoyloxy or C₁-

C₁₂alkyl-substituted benzoyloxy; $\text{O}-\text{C}(\text{R}_{18})=\text{C}(=\text{O})-\text{R}_{15}$ or $\text{O}-\text{C}(\text{R}_{20})-\text{C}(\text{H})-\text{C}(\text{R}_{22})-\text{O}-\text{R}_{23}$ or, in

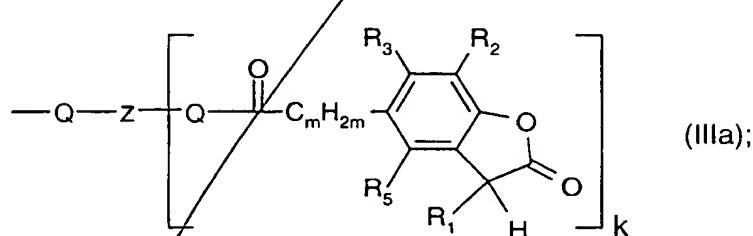
formula II, R₇ and R₈, or R₈ and R₁₁, together with the linking carbon atoms, form a benzene ring,

R₁₂ and R₁₃ are each independently of the other unsubstituted or C₁-C₄alkyl-substituted phenylene or naphthylene,

R₁₄ is hydrogen or C₁-C₈alkyl,

A3T

R₁₅ is hydroxy, $\left[-O\overset{r}{\underset{r}{\text{---}}}M^{r+}\right]$, C₁-C₂₀alkoxy, or a group of the formula IIIa



R₁₆ and R₁₇ are each independently of the other hydrogen, CF₃, C₁-C₁₂alkyl or phenyl, or R₁₆ and R₁₇, together with the linking carbon atom, are a C₅-C₈cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₁₈ and R₁₉ are each independently of the other hydrogen, C₁-C₄alkyl or phenyl,

R₂₀ is hydrogen or C₁-C₄alkyl,

R₂₁ is hydrogen, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or $\text{N}—R_{14}$; C₇-C₉phenylalkyl which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C₁-C₄alkyl; C₇-C₂₅phenylalkyl which is interrupted by oxygen, sulphur or $\text{N}—R_{14}$ and which is unsubstituted or substituted at

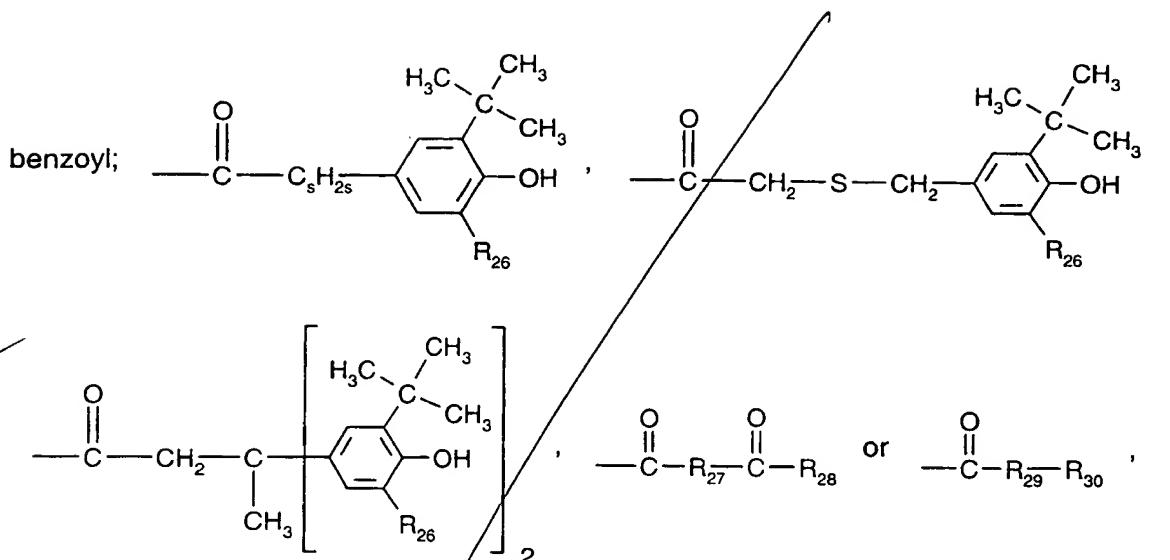
the phenyl moiety by 1 to 3 C₁-C₄alkyl, or R₂₀ and R₂₁, together with the linking carbon atoms, form a C₅-C₁₂cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

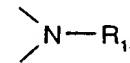
R₂₂ is hydrogen or C₁-C₄alkyl,

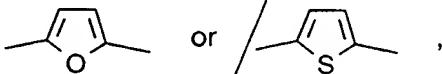
R₂₃ is hydrogen, C₁-C₂₅alkanoyl, C₃-C₂₅alkenoyl; C₃-C₂₅alkanoyl which is interrupted by

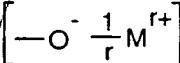
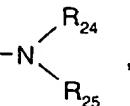
oxygen, sulphur or $\text{N}—R_{14}$; C₂-C₂₅alkanoyl which is substituted by a di(C₁-C₆alkyl)phosphonate group; C₆-C₉cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C₁-C₁₂alkyl-substituted

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R₂₄ and R₂₅ are each independently of the other hydrogen or C₁-C₁₈alkyl,
 R₂₆ is hydrogen or C₁-C₈alkyl,
 R₂₇ is a direct bond, C₁-C₁₈alkylene; C₂-C₁₈alkylene which is interrupted by oxygen, sulphur
 or  ; C₂-C₁₈alkenylene, C₂-C₂₀alkylidene, C₇-C₂₀phenylalkylidene, C₅-C₈cycloalky-
 lene, C₇-C₈bicycloalkylene, unsubstituted or C₁-C₄alkyl-substituted phenylene,



R₂₈ is hydroxy,  , C₁-C₁₈alkoxy or 

R₂₉ is oxygen or -NH-,
 R₃₀ is C₁-C₁₈alkyl or phenyl,
 R₃₁ is hydrogen or C₁-C₁₈alkyl,

M is an r-valent metal cation,

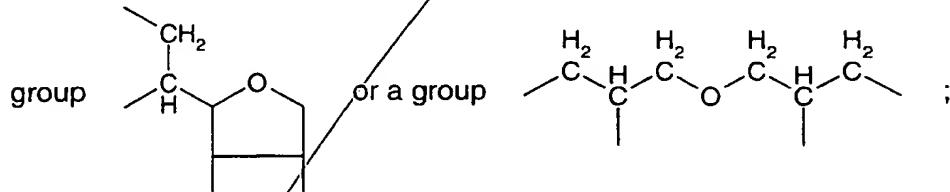
Q is oxygen or -NH-,

X is a direct bond, oxygen, sulphur or -NR₃₁- ,

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene, Q-interrupted C₄-C₁₂alkylene, phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

Z as a trivalent group is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent residue of a hexose or a hexitol, C₄-C₁₂alkanetetriyl, a



a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12, preferably 1-6,

n is 1 or 2,

q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3, and

s is 0, 1 or 2;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄.

4. Process according to claim 1, wherein in the compound of formula I

R₂, R₃ and R₅, independently, are H, Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl,

unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy,

C₃-C₂₅alkenoyloxy; and where

R₄ is Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy, C₃-C₂₅alkenoyloxy or is a group -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR'₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R'₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or where R₃, R₅ and R₆ are H, R₄ may be a residue of formula III, or where R₈ or R₁₀ are other than H, R₄ may also be hydrogen;

R₆ is H,

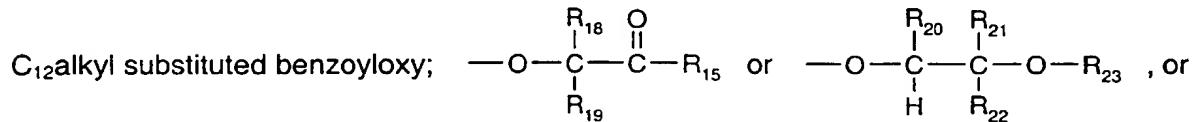
R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or  ; C₃-C₂₅-alkenyl; C₃-C₂₅alkynyl; C₇-

C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl;

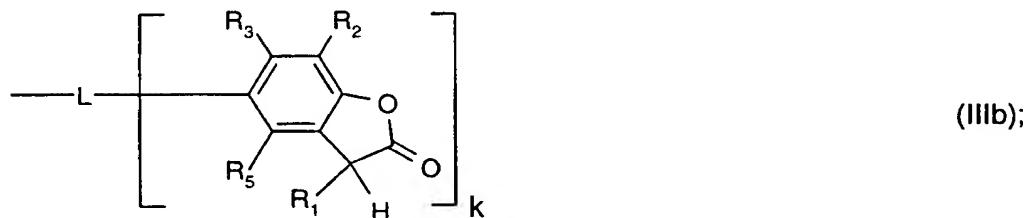
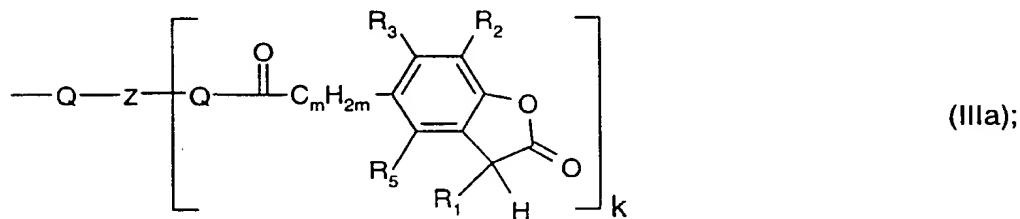
R₈, R₁₀ and R₁₁ independently are H, halogen, hydroxy, C₁-C₂₅alkyl, O interrupted C₂-C₂₅alkyl; C₁-C₂₅alkoxy, O interrupted C₂-C₂₅alkoxy, C₃-C₂₅alkenyl, C₃-C₂₅alkenyloxy, C₇-

C₉phenylalkyl, C₇-C₉phenylalkoxy, unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl substituted phenoxy; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino, di-(C₁-C₄-alkyl)amino, C₁-C₂₅alkanoyl; C₁-C₂₅alkanoyloxy; C₆-C₉cycloalkylcarbonyl, C₆-C₉cycloalkylcarbonyloxy, benzoyl or C₁-C₁₂alkyl-substituted benzoyl; benzoyloxy or C₁-C₁₂alkyl substituted benzoyloxy;



where in formula II R₇ and R₈ or R₈ and R₁₁ together with the carbon atoms, they are bonded to, form a phenyl ring;

R₁₅ and R'₁₅ independently are C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or are C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; or -NR₂₃R₂₄; or a group of formula IIIa or IIIb;



R₁₆ and R₁₇ independently are H, CF₃, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form an unsubstituted or 1-3 C₁-C₄alkyl-substituted C₅-C₈cycloalkylidene ring;

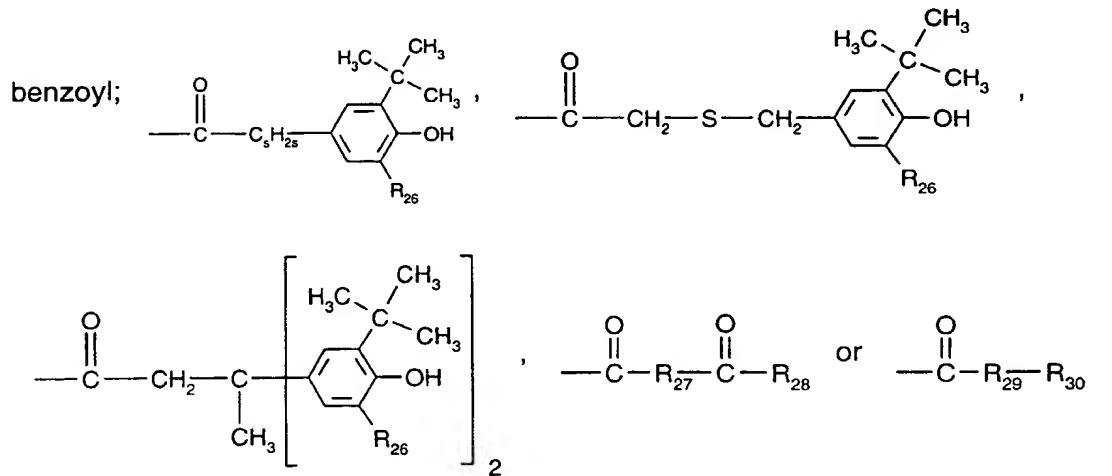
R₁₈ and R₁₉ independently are H, C₁-C₄alkyl or phenyl;

R₂₀ is H or C₁-C₄alkyl;

R₂₁ is H, unsubstituted or C₁-C₄alkyl substituted phenyl; C₁-C₂₅alkyl, unsubstituted or on the phenyl ring 1-3 C₁-C₄alkyl-substituted C₇-C₉phenylalkyl;

R_{22} is H or $C_1\text{-}C_4$ alkyl;

R_{23} is H, $C_1\text{-}C_{25}$ alkanoyl, $C_3\text{-}C_{25}$ alkenoyl; di($C_1\text{-}C_6$ alkyl)phosphonate-substituted $C_2\text{-}C_{25}$ alkanoyl; $C_6\text{-}C_9$ cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or $C_1\text{-}C_{12}$ alkyl-substituted

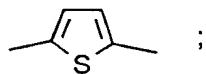


R_{24} and R_{25} independently are H or $C_1\text{-}C_{18}$ alkyl;

R_{26} is H or $C_1\text{-}C_8$ alkyl;

R_{27} is a direct bond, $C_1\text{-}C_{18}$ alkylene, $C_2\text{-}C_{18}$ alkenylene, $C_7\text{-}C_{20}$ phenylalkylen, $C_5\text{-}C_8$

cycloalkylene, unsubstituted or $C_1\text{-}C_4$ alkyl-substituted phenylene, or



R_{28} $C_1\text{-}C_{18}$ alkoxy or

R_{29} is O or -NH-;

R_{30} $C_1\text{-}C_{18}$ alkyl or phenyl;

M a metal cation of the valency r;

X a direct bond, O, S or $-NR_{31}^-$;

n 1 or 2;

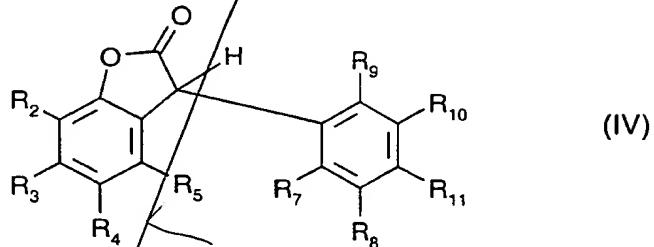
m is a number from the range 1-8;

q 1, 2, 3, 4, 5 or 6;

r 1, 2 or 3; and

s is 0, 1 or 2.

Schwarz
5. Process according to claim 1 wherein the compound of formula I corresponds to the formula IV



wherein

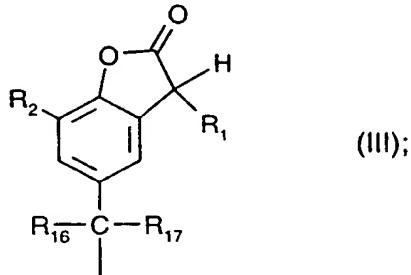
R₂ is H or C₁-C₂₀alkyl;

R₃ is H or C₁-C₁₈alkyl;

R₄ is C₁-C₈alkyl, H, C₁-C₆alkoxy or a group $-C_mH_{2m}-COR_{15}$; $-O-(C_vH_{2v})-COR_{15}$,

$-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; $-OCH_2-CH(OH)-CH_2-OR_{32}$;

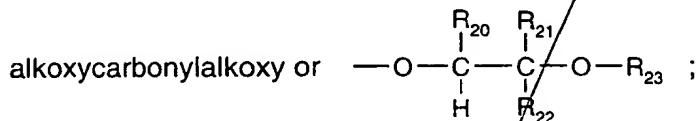
or a group of the formula III



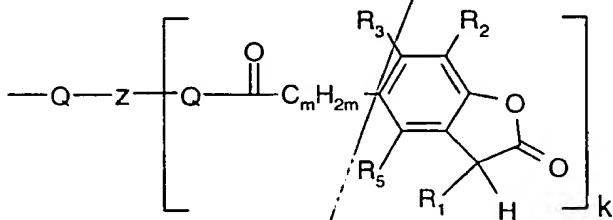
R₅ is H or C₁-C₁₈alkyl;

R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₃-C₂₅-alkenyl; C₃-C₂₅alkynyl; C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₆cycloalkyl;

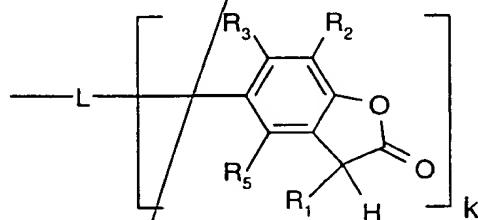
R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-C₄alkyl)amino, C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; C₂-C₁₈alkanoyloxy, C₃-C₁₈-



(A3) especially wherein at least 2 of the residues R₇, R₈, R₉, R₁₀, R₁₁ are H; R₁₅ is C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O; or are cyclohexyloxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;



(IIIa);

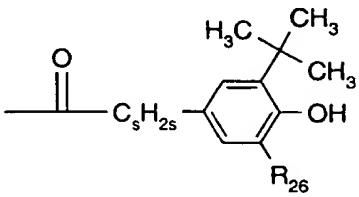


(IIIb);

R₁₆ and R₁₇ independently are H, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form a C₅-C₈cycloalkylidene ring;

R₂₀, R₂₁ and R₂₂ independently are H or C₁-C₄alkyl;

R₂₃ is H, C₂-C₁₈alkanoyl or a group



R₂₆ is C₁-C₄alkyl;

R₃₂ is C₁₇-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q-C₂-C₁₂alkylene-Q; -O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-; -O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

A3
and

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6;

v is 1 or 2; and

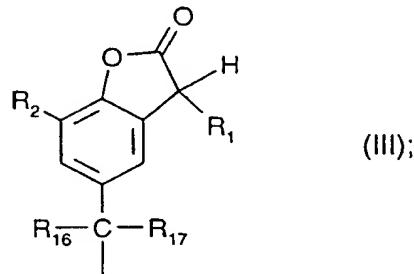
s is 0, 1 or 2.

6. Process according to claim 5 wherein in the compound of formula IV

R₂ is C₁-C₂₀alkyl;

R₃ is H or C₁-C₁₈alkyl;

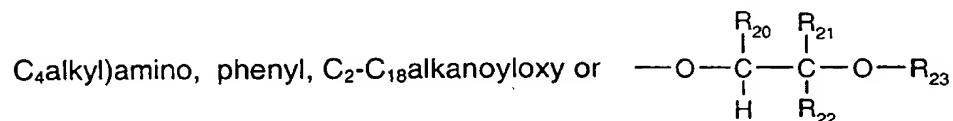
R₄ is C₁-C₆alkyl, C₁-C₆alkoxy or a group -C_mH_{2m}-COR₁₅ or a group of the formula III



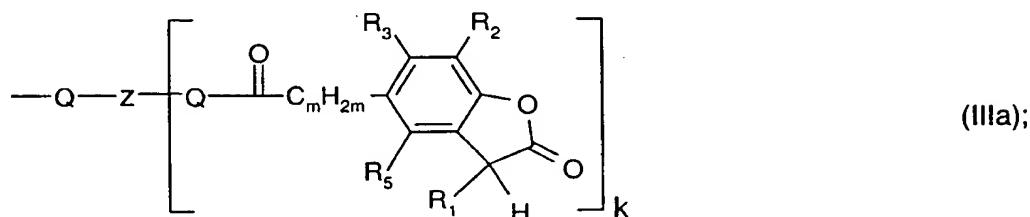
R₅ is H or C₁-C₁₈alkyl;

R₇ and R₉ independently are H, chloro, C₁-C₁₈alkyl;

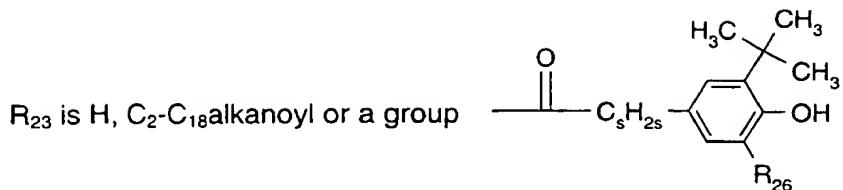
R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-



R₁₅ is C₁-C₁₈alkoxy or a group of the formula IIIa



R₂₀, R₂₁ and R₂₂ are H;



R_{26} is C₁-C₄ alkyl;

Q is oxygen;

Z is C₂-C₁₂ alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6 and

s is 0, 1 or 2.

7. Process according to claim 5 wherein in the compound of formula IV, R_4 is C₁-C₆ alkyl, or a group -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or a group of the formula III.

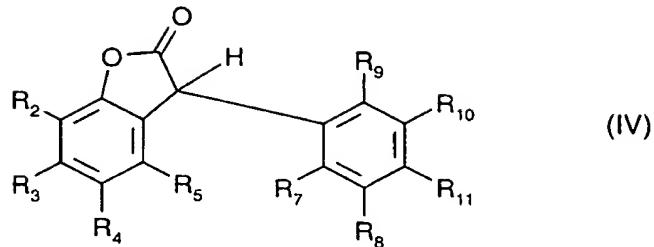
8. Process according to claim 1, wherein the compound of formula I is incorporated into the colour photographic material in an amount from 10 to 1000 mg/m².

9. Process according to claim 1, wherein the compound of formula I is concentrated in one or more interlayers separating light sensitive layers of the colour photographic material.

10. Process according to claim 9, wherein a green-sensitive layer containing a magenta coupler of the pyrazolo-azole class is adjacent to an interlayer containing the compound of formula I.

11. Use of a compound of the formula I according to claim 1 as a scavenger for the oxidised developer in a colour photographic material.

12. A colour photographic material or digital recording material containing a compound of the formula IV



wherein

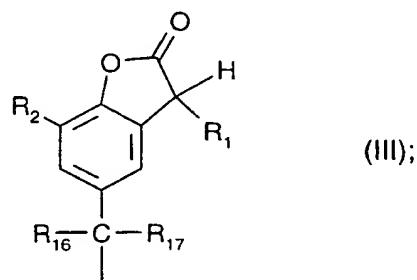
R_2 is H or C_1-C_{20} alkyl;

R_3 is H or C_1-C_{18} alkyl;

R_4 is C_1-C_8 alkyl, C_1-C_6 alkoxy or a group $-C_mH_{2m}-COR_{15}$; $-O-(C_vH_{2v})-COR_{15}$,

$-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; $-OCH_2-CH(OH)-CH_2-OR_{32}$;

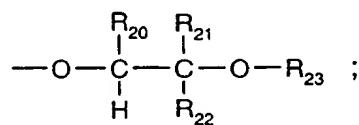
or a group of the formula III



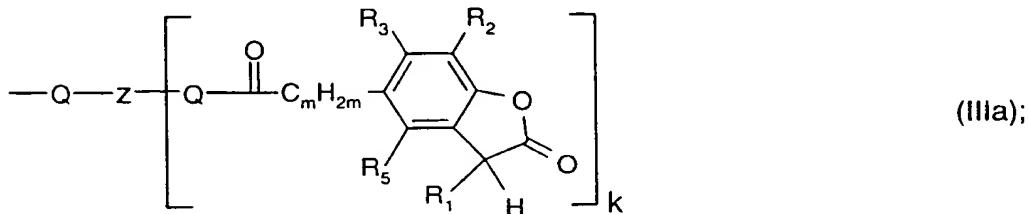
R_5 is H or C_1-C_{18} alkyl;

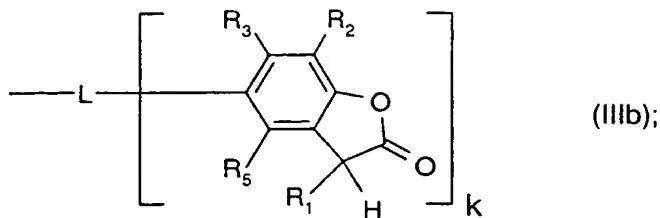
R_7 and R_9 independently are H, chloro, C_1-C_{18} alkyl or phenyl;

R_8 , R_{10} and R_{11} independently are H, OH, chloro, C_1-C_{18} alkyl, C_1-C_{18} alkoxy, di(C_1-C_4 alkyl)amino, phenyl, C_2-C_{18} alkanoyloxy, C_3-C_{18} alkoxycarbonylalkoxy or



R_{15} is C_1-C_{18} alkoxy; C_3-C_{20} alkoxy interrupted by O; or are cyclohexyloxy; C_7-C_{17} phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;

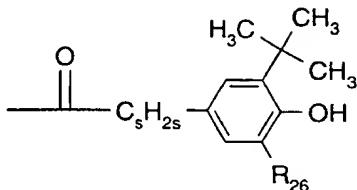




R_{16} and R_{17} independently are H, C₁-C₁₂alkyl or phenyl; or R_{16} and R_{17} together with the bonding carbon atom form a C₅-C₈cycloalkylidene ring;

R_{20} , R_{21} and R_{22} independently are H or C₁-C₄alkyl;

R_{23} is H, C₂-C₁₈alkanoyl or a group



R_{26} is C₁-C₄alkyl;

R_{32} is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q-C₂-C₁₂alkylene-Q; -O-CH₂-CH(OH)-CH₂-O-; -Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-; -O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6;

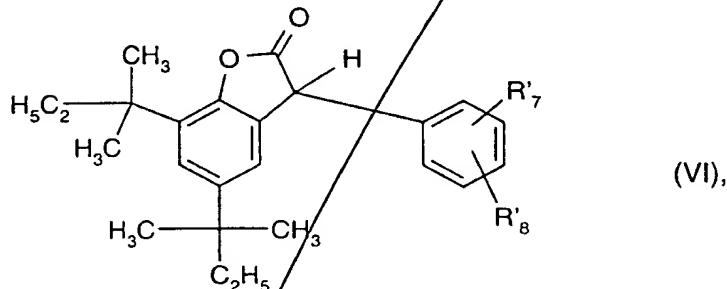
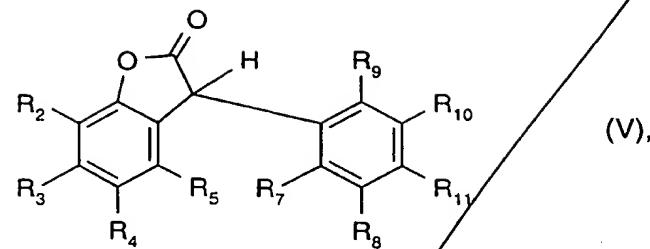
v is 1 or 2 and

s is 0, 1 or 2.

13. Use of a compound of the formula IV according to claim 12 as an additive in a colour photographic material or digital recording material.

14. Compound of the formula V or VI

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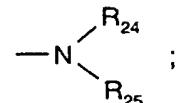
wherein

R_4 is $-(CH_2)_n-COR'_{15}$ or $-CH(CH_3)-COR_{15}$ or $-C_1H_{21}-COR_{15}$, wherein C_1H_{21} is a straight chain or branched alkylene moiety; or R_4 is $-O-(C_2H_{2n})-COR_{15}$; $-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; or $-OCH_2-CH(OH)-CH_2-OR_{32}$;

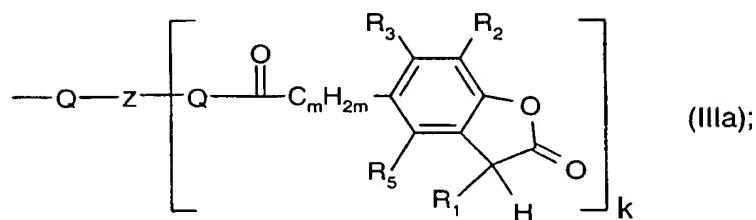
R'_7 is C_1-C_4 alkyl and R'_8 is hydrogen or C_1-C_4 alkyl;

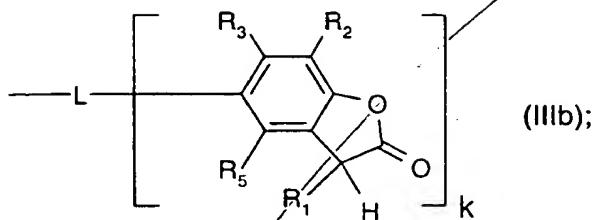
R_{15} is hydroxy, $\left[-O^{-} \frac{1}{r} M^{r+} \right]$, C_1-C_{20} alkoxy; C_3-C_{20} alkoxy interrupted by O and/or

substituted by a radical selected from OH, phenoxy, C_7-C_{15} alkylphenoxy, C_7-C_{15} alkoxyphenoxy; or R_{15} is C_5-C_{12} cycloalkoxy; C_7-C_{17} phenylalkoxy; phenoxy;



or a group of formula IIIa or IIIb;





*R'*₁₅ is C₃-C₂₀alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or R'₁₅ is C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;

*R*₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is, as a divalent group,

-O-;

Q-C₂-C₁₂alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-interrupted Q-C₄-C₁₂alkylene-Q;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L, as a trivalent group, is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q-)-C_cH_{2c}-Q-;

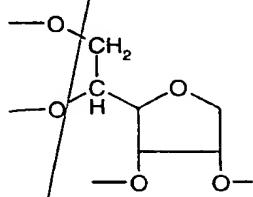
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

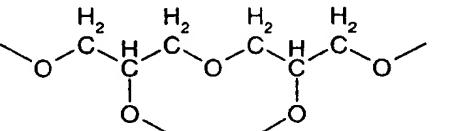
L, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetryl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetryl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetryl; a group



or a group



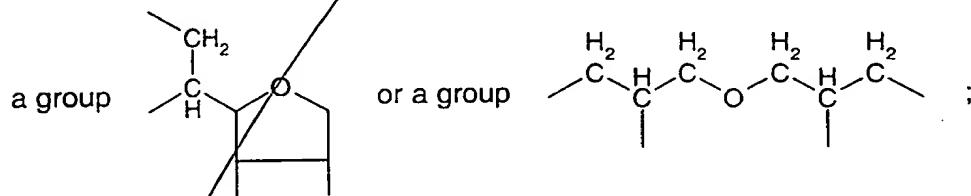
Q is oxygen or -NH-,

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Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene, Q-interrupted C₄-C₁₂alkylene, phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

Z, as a trivalent group, is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}-; and

Z, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol, C₄-C₁₂alkanetetrayl,



a, b, c and k independently are 1, 2 or 3,
 m is 0 or a number from the range 1-12,
 s is 1 or 2,
 and t is a number from the range 3-12,
 v is 1, 2, 3, 4, 5, 6, 7 or 8;
 and all other residues are as defined in claim 1 for formula I if n is 1.

Sig 3
 15. Process for stabilizing an organic material against deterioration by light, oxygen and/or heat, which process comprises incorporating a compound of the formula V and/or VI according to claim 14 as stabilizer into said organic material.

Sig 4
 16. Use of a compound of the formula V and/or VI according to claim 14 as stabilizer for organic material against deterioration by light, oxygen and/or heat.